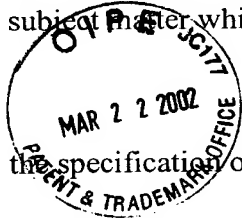


DECLARATION FOR PATENT APPLICATION

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19 HUMAN SECRETED PROTEINS

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Prior Foreign Application(s):

Priority Claimed
Yes No

(Number)

(Country)

(Day/Month/Year Filed)

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<u>60/163,085</u>	<u>November 2, 1999</u>
(Application Serial No.)	(Filing Date)
<u>60/172,411</u>	<u>December 17, 1999</u>
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PCT/US00/28664
(Application Serial No.)

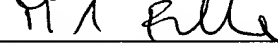
October 17, 2000
(Filing Date)

Pending
(Status: patented, pending, abandoned)

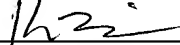
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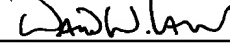
Full name of first joint inventor: Michele Fiscella

Inventor's signature:  Date: 1-10-02
Residence: 6308 Redwing Road, Bethesda, MD 20817 Citizenship: IT
Post Office Address: same as above


Full name of additional joint inventor: Ping Wei

Inventor's signature:  Date: 1-10-02
Residence: 19100 Old Baltimore Road, Brookeville, MD 20833 Citizenship: CN
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Full name of additional joint inventor: George A. Komatsoulis

Inventor's signature: *George A. Komatsoulis* Date: 1/11/02
Residence: 9518 Garwood Street, Silver Spring, MD 20901 Citizenship: US
Post Office Address: same as above

Full name of additional joint inventor: Craig A. Rosen

Inventor's signature: *Craig A. Rosen* Date: 1/15/02
Residence: 22400 Rolling Hills Road, Laytonsville, MD 20882 Citizenship: US
Post Office Address: same as above

Full name of additional joint inventor: Steven M. Ruben

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Post Office Address: same as above

Full name of additional joint inventor: Kimberly A. Florence

Inventor's signature: *Kimberly A. Florence* Date: 1/16/02
Residence: 12805 Atlantic Avenue, Rockville, MD 20851 Citizenship: US
Post Office Address: same as above

Full name of additional joint inventor: Paul A. Moore

Inventor's signature: Paul A. Moore Date: 1/10/02
Residence: 19005 Leatherbark Drive, Germantown, MD 20874 Citizenship: GB
Post Office Address: same as above

Full name of additional joint inventor: Charles E. Birse

Inventor's signature: Charles E. Birse Date: 1/8/02
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Post Office Address: same as above

Full name of additional joint inventor: Jian Ni

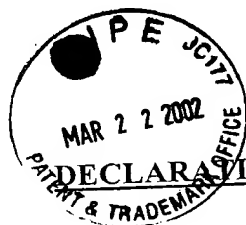
Inventor's signature: [Signature] Date: 1/10/02
Residence: 5502 Manorfield Road, Rockville, MD 20853 Citizenship: CN
Post Office Address: same as above

Full name of additional joint inventor: Daniel R. Soppet

Inventor's signature: _____ Date: _____
Residence: 15050 Stillfield Place, Centreville, VA 22020 Citizenship: US
Post Office Address: same as above

Full name of additional joint inventor: Yanggu Shi

Inventor's signature: Yanggu Shi Date: 1/8/02
Residence: 437 West Side Drive, Apt. 102, Gaithersburg, MD 20878 Citizenship: CN
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Full name of first joint inventor:

Michele Fiscella

Inventor's signature: _____

Date: _____

Residence: 6308 Redwing Road, Bethesda, MD 20817

Citizenship: IT

Post Office Address: same as above

Full name of additional joint inventor:

Ping Wei

Inventor's signature: _____

Date: _____

Residence: 19100 Old Baltimore Road, Brookeville, MD 20833

Citizenship: CN

Post Office Address: same as above

Full name of additional joint inventor:

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Inventor's signature: _____

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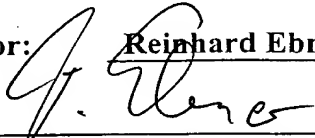
Residence: 14006 Indian Run Drive, Darnestown, MD 20878

Citizenship: GB

Post Office Address: same as above

Full name of additional joint inventor:

Reinhard Ebner

Inventor's signature: 

Date: 2/5/02

Residence: 9906 Shelburne Terrace, #316, Gaithersburg, MD 20878

Citizenship: DE

Post Office Address: same as above

Full name of additional joint inventor:

George A. Komatsoulis

Inventor's signature: _____

Date: _____

Residence: 9518 Garwood Street, Silver Spring, MD 20901

Citizenship: US

Post Office Address: same as above

Full name of additional joint inventor:

Craig A. Rosen

Inventor's signature: _____

Date: _____

Residence: 22400 Rolling Hills Road, Laytonsville, MD 20882

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Steven M. Ruben

Inventor's signature: _____

Date: _____

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Citizenship: US

Post Office Address: same as above

Full name of additional joint inventor:

Roxanne D. Duan

Inventor's signature: _____

Date: _____

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Citizenship: US

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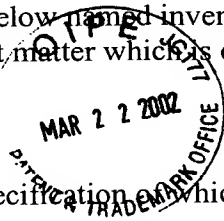
Inventor's signature: *Daniel R. Soppet* Date: 3/15/02
Residence: 15050 Stillfield Place, Centreville, VA 22020 Citizenship: US
Post Office Address: same as above

Full name of additional joint inventor: Yanggu Shi

Inventor's signature: _____ Date: _____
Residence: 437 West Side Drive, Apt. 102, Gaithersburg, MD 20878 Citizenship: CN
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October 17, 2000
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Full name of first joint inventor: Michele Fiscella

Inventor's signature: _____ Date: _____
Residence: 6308 Redwing Road, Bethesda, MD 20817 Citizenship: IT
Post Office Address: same as above

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Inventor's signature: _____ Date: _____
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Full name of additional joint inventor: Roxanne D. Duan

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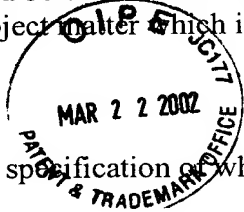
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Full name of additional joint inventor: Yanggu Shi

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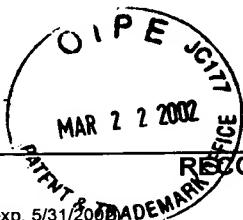
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Form PTO-1595
(Rev. 03/01)

OMB No. 0651-0027 (exp. 5/31/2008)

**RECORDATION FORM COVER SHEET
PATENTS ONLY**

U.S. DEPARTMENT OF COMMERCE
U.S. Patent and Trademark Office

To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof

1. Name of conveying party(ies):

Michele Fiscella (January 10, 2002), Ping Wei (January 10, 2002), David W. LaFleur (January 11, 2002), Henrik S. Olsen (January 10, 2002), Kevin P. Baker (January 10, 2002),

Additional name(s) of conveying party(ies) attached?

☒ Yes ☐ No

3. Nature of Conveyance:

☒ Assignment

☐ Merger

☐ Security Agreement

☐ Change of Name

☐ Other

Execution Date: see Box 1, conveying parties

2. Name and address of receiving party(ies)

Name: Human Genome Sciences, Inc.

Internal Address: _____

Street Address: _____

9410 Key West Avenue

City: Rockville

State: MD

Zip: 20850

Additional name(s) & address(es) attached:

☐ Yes ☒ No

4. Application number(s) or patent number(s):

If this document is being filed together with a new application, the execution date of the new application is: _____

A. Patent Application No.(s):

09/832,129

B. Patent No.(s): _____

Additional numbers attached? ☐ Yes ☒ No

5. Name and address of party to whom correspondence concerning document should be mailed:

Name: Janet M. Martineau
HUMAN GENOME SCIENCES, INC.

Internal Address: Atty. Dkt.: PZ045P1

Street Address: 9410 Key West Avenue

City:
Rockville

State: MD Zip: 20850

6. Total number of applications and patents involved:

1

7. Total fee (37 CFR 3.41)

\$ 40.00

☐ Enclosed

☒ Authorized to be charged to deposit account

8. Deposit account number:

08-3425

(Attach duplicate copy of this page if paying by deposit account)

DO NOT USE THIS SPACE

9. Statement and signature.

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

Janet M. Martineau
Name of Person Signing


Signature

March 22, 2002
Date

Total number of pages including cover sheet, attachments, and documents: 14



Form PTO-1595

RECORDATION FORM COVER SHEET
(continued)

Additional Conveying Party(ies) (1. Continued):

Reinhard Ebner (March 5, 2002), George A. Komatsoulis (January 11, 2002), Craig A. Rosen (January 15, 2002), Steven M. Ruben (January 10, 2002), D. Roxanne Duan (January 9, 2002), Paul E. Young (February 26, 2002), Kimberly A. Florence (January 16, 2002), Paul A. Moore (January 10, 2002), Charles E. Birse (January 8, 2002), Jian Ni (January 10, 2002), Daniel R. Soppet (March 5, 2002), and Yanggu Shi (January 8, 2002)

Additional Assignees (2. Continued):

Assignee Name: _____

Internal Address: _____

Street Address: _____

City: _____ State: _____ Zip Code: _____

Assignee Name: _____

Internal Address: _____

Street Address: _____

City: _____ State: _____ Zip Code: _____

Assignee Name: _____

Internal Address: _____

Street Address: _____

City: _____ State: _____ Zip Code: _____

Additional Applications and/or Patents (4. Continued):

Additional Patent Application Numbers
4A. Continued:

Additional Patent Numbers
4B. Continued:

Additional numbers attached?

☐

Yes

☒

No

ASSIGNMENT

For good and valuable consideration, the receipt of which is hereby acknowledged, each of the undersigned, **Michele Fiscella, Ping Wei, David W. LaFleur, Henrik S. Olsen, Kevin P. Baker, Reinhard Ebner, George A. Komatsoulis, Craig A. Rosen, Steven M. Ruben, Roxanne D. Duan, Paul E. Young, Kimberly A. Florence, Paul A. Moore, Charles E. Birse, Jian Ni, Daniel R. Soppet, and Yanggu Shi**, , hereby sells, assigns, transfers, and sets over to Human Genome Sciences, Inc. ("Assignee") having a place of business at 9410 Key West Avenue, Rockville, MD 20850, its successors, assigns and legal representatives, his/her entire right, title and interest, including the right to sue and collect for all past, present and future damages, for the United States of America, including all its territories and possessions, and all other countries,

- (a) in and to the invention known as **19 HUMAN SECRETED PROTEINS** for which application for United States Letters Patent was filed on **April 11, 2001**, and assigned US Serial No. **09/832,129**, in any and all applications thereon, in any and all Patent(s) therefore, and
- (b) in any and all applications that claim the benefit of the patent application listed above in part (a), including continuing (continuation, divisional) applications, reissues, extensions, renewals and reexaminations of the patent application or patent therefor listed above in part (a), to the full extent of the term or terms for which patents issue, and
- (c) in any and all inventions described in the patent application listed above in part (a), and in any and all forms of intellectual and industrial property protection derivable from such patent application, and that are derivable from any and all continuing applications, reissues, extensions, renewals, and examinations of such patent application, including, without limitation, patents, applications, utility models, inventor's certificates, and designs together with the right to file applications therefor; and including the right to claim the same priority rights from any previously filed applications under the International Agreement for the Protection of Industrial Property, or any other international agreement, or the domestic laws of the country in which any such application is filed, as may be applicable;

all such rights, title and interest to be held and enjoyed by the above-named Assignee, its successors, legal representatives and assigns to the same extent as all such rights, title and interest would have been held and enjoyed by the Assignor had this assignment and sale not been made.

Each of the undersigned further agrees that said Assignee may apply for and receive patent(s) for said invention(s) in its own name; and agrees to execute all papers necessary in connection with said application(s) and any continuing application(s) (continuation, divisional, or continuation-in-part), substitutes, renewals, reissues, reexaminations, extensions, and all other patent applications on all such invention(s), including all rightful oaths, declarations, powers of attorney and other papers; and agrees to execute separate assignments in connection with such application(s) as the Assignee may deem necessary and expedient; and agrees to communicate to said Assignee, its successors, assigns, and representatives all facts known to the undersigned relating to said invention(s) and the history thereof; and agrees to cooperate fully and completely with said Assignee, its successors, assigns, and representatives in securing, maintaining, and enforcing proper patent protection for said invention(s) and for vesting title to said invention(s) and all patent applications and all patents on said invention(s) in Assignee, its successors, assigns and representatives.

Each of the undersigned agrees to execute all papers necessary in connection with any interference that may be declared or litigation that may be instituted concerning the application(s) or patent(s) referred to above and to cooperate fully and completely with the Assignee, its successors, assigns, and representatives in obtaining evidence and going forward with such interference or litigation, including providing testimonial evidence.

Each of the undersigned hereby represents and warrants to Assignee, its successors, assigns and representatives that no assignment, grant, mortgage, license or other right or agreement affecting the rights and property herein conveyed has been or will be made to others by the undersigned and that full right to convey the same as expressed herein is possessed by the undersigned.

Each of the Practitioners at **Customer Number 22195** is hereby granted with full power to insert on this Assignment any further identification which may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.

IN WITNESS WHEREOF, this Assignment is executed by the undersigned on the date(s) opposite their signature(s):

Inventor's Signature: Michele Fiscella Date: 1-10-02
Michele Fiscella

Inventor's Signature: Ping Wei Date: 1-10-02
Ping Wei

Inventor's Signature: David W. LaFleur Date: 1/11/02
David W. LaFleur

Inventor's Signature: Henrik S. Olsen Date: 1/10/02
Henrik S. Olsen

Inventor's Signature: Kevin P. Baker Date: 1/10/02
Kevin P. Baker

Inventor's Signature: _____ Date: _____
Reinhard Ebner

Inventor's Signature: George A. Komatsoulis Date: 1/11/02
George A. Komatsoulis

Inventor's Signature: Craig A. Rosen Date: 1/15/02
Craig A. Rosen

Inventor's Signature: Steven M. Ruben Date: 1/10/02
Steven M. Ruben

Inventor's Signature: _____ Date: _____
Roxanne D. Duan

Inventor's Signature: _____ Date: _____
Paul E. Young

Inventor's Signature: Kimberly A. Florence Date: 1/16/02
Kimberly A. Florence

Inventor's Signature: Paul A. Moore Date: 1/10/02
Paul A. Moore

Inventor's Signature: Charles E. Birse Date: 1/8/02
Charles E. Birse

Inventor's Signature: Jian Ni Date: 1/10/02
Jian Ni

Inventor's Signature: _____ Date: _____
Daniel R. Soppet

Inventor's Signature: Yanggu Shi Date: 1/8/02
Yanggu Shi

ASSIGNMENT

For good and valuable consideration, the receipt of which is hereby acknowledged, each of the undersigned, Michele Fiscella, Ping Wei, David W. LaFleur, Henrik S. Olsen, Kevin P. Baker, Reinhard Ebner, George A. Komatsoulis, Craig A. Rosen, Steven M. Ruben, Roxanne D. Duan, Paul E. Young, Kimberly A. Florence, Paul A. Moore, Charles E. Birse, Jian Ni, Daniel R. Soppet, and Yanggu Shi, , hereby sells, assigns, transfers, and sets over to Human Genome Sciences, Inc. ("Assignee") having a place of business at 9410 Key West Avenue, Rockville, MD 20850, its successors, assigns and legal representatives, his/her entire right, title and interest, including the right to sue and collect for all past, present and future damages, for the United States of America, including all its territories and possessions, and all other countries,

- (a) in and to the invention known as **19 HUMAN SECRETED PROTEINS** for which application for United States Letters Patent was filed on April 11, 2001, and assigned US Serial No. 09/832,129, in any and all applications thereon, in any and all Patent(s) therefore, and
- (b) in any and all applications that claim the benefit of the patent application listed above in part (a), including continuing (continuation, divisional) applications, reissues, extensions, renewals and reexaminations of the patent application or patent therefor listed above in part (a), to the full extent of the term or terms for which patents issue, and
- (c) in any and all inventions described in the patent application listed above in part (a), and in any and all forms of intellectual and industrial property protection derivable from such patent application, and that are derivable from any and all continuing applications, reissues, extensions, renewals, and examinations of such patent application, including, without limitation, patents, applications, utility models, inventor's certificates, and designs together with the right to file applications therefor; and including the right to claim the same priority rights from any previously filed applications under the International Agreement for the Protection of Industrial Property, or any other international agreement, or the domestic laws of the country in which any such application is filed, as may be applicable;

all such rights, title and interest to be held and enjoyed by the above-named Assignee, its successors, legal representatives and assigns to the same extent as all such rights, title and interest would have been held and enjoyed by the Assignor had this assignment and sale not been made.

Each of the undersigned further agrees that said Assignee may apply for and receive patent(s) for said invention(s) in its own name; and agrees to execute all papers necessary in connection with said application(s) and any continuing application(s) (continuation, divisional, or continuation-in-part), substitutes, renewals, reissues, reexaminations, extensions, and all other patent applications on all such invention(s), including all rightful oaths, declarations, powers of attorney and other papers; and agrees to execute separate assignments in connection with such application(s) as the Assignee may deem necessary and expedient; and agrees to communicate to said Assignee, its successors, assigns, and representatives all facts known to the undersigned relating to said invention(s) and the history thereof; and agrees to cooperate fully and completely with said Assignee, its successors, assigns, and representatives in securing, maintaining, and enforcing proper patent protection for said invention(s) and for vesting title to said invention(s) and all patent applications and all patents on said invention(s) in Assignee, its successors, assigns and representatives.

Each of the undersigned agrees to execute all papers necessary in connection with any interference that may be declared or litigation that may be instituted concerning the application(s) or patent(s) referred to above and to cooperate fully and completely with the Assignee, its successors, assigns, and representatives in obtaining evidence and going forward with such interference or litigation, including providing testimonial evidence.

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Each of the Practitioners at Customer Number 22195 is hereby granted with full power to insert on this Assignment any further identification which may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.

IN WITNESS WHEREOF, this Assignment is executed by the undersigned on the date(s) opposite their signature(s):

Inventor's Signature: _____ Date: _____
Michele Fiscella

Inventor's Signature: _____ Date: _____
Ping Wei

Inventor's Signature: _____ Date: _____
David W. LaFleur

Inventor's Signature: _____ Date: _____
Henrik S. Olsen

Inventor's Signature: _____ Date: _____
Kevin P. Baker

Inventor's Signature: _____ Date: 2/15/2002
Reinhard Ebner

Inventor's Signature: _____ Date: _____
George A. Komatsoulis

Inventor's Signature: _____ Date: _____
Craig A. Rosen

Inventor's Signature: _____ Date: _____
Steven M. Ruben

Inventor's Signature: _____ Date: _____
Roxanne D. Duan

Inventor's Signature: _____ Date: _____
Paul E. Young

Inventor's Signature: _____ Date: _____
Kimberly A. Florence

Inventor's Signature: _____ Date: _____
Paul A. Moore

Inventor's Signature: _____ Date: _____
Charles E. Birse

Inventor's Signature: _____ Date: _____
Jian Ni

Inventor's Signature: *Daniel R. Soppet* Date: 3/5/02
Daniel R. Soppet

Inventor's Signature: _____ Date: _____
Yanggu Shi

ASSIGNMENT

For good and valuable consideration, the receipt of which is hereby acknowledged, each of the undersigned, **Michele Fiscella, Ping Wei, David W. LaFleur, Henrik S. Olsen, Kevin P. Baker, Reinhard Ebner, George A. Komatsoulis, Craig A. Rosen, Steven M. Ruben, Roxanne D. Duan, Paul E. Young, Kimberly A. Florence, Paul A. Moore, Charles E. Birse, Jian Ni, Daniel R. Soppet, and Yanggu Shi**, hereby sells, assigns, transfers, and sets over to Human Genome Sciences, Inc. ("Assignee") having a place of business at 9410 Key West Avenue, Rockville, MD 20850, its successors, assigns and legal representatives, his/her entire right, title and interest, including the right to sue and collect for all past, present and future damages, for the United States of America, including all its territories and possessions, and all other countries,

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George A. Komatsoulis

Inventor's Signature: _____ Date: _____
Craig A. Rosen

Inventor's Signature: _____ Date: _____
Steven M. Ruben

Inventor's Signature: Roxanne Duan Date: 1/9/02
Roxanne D. Duan

Inventor's Signature: _____ Date: _____
Paul E. Young

Inventor's Signature: _____ Date: _____
Kimberly A. Florence

Inventor's Signature: _____ Date: _____
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Yanggu Shi

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Michele Fiscella

Inventor's Signature: _____ Date: _____
Ping Wei

Inventor's Signature: _____ Date: _____
David W. LaFleur

Inventor's Signature: _____ Date: _____
Henrik S. Olsen

Inventor's Signature: _____ Date: _____
Kevin P. Baker

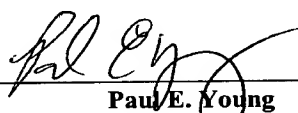
Inventor's Signature: _____ Date: _____
Reinhard Ebner

Inventor's Signature: _____ Date: _____
George A. Komatsoulis

Inventor's Signature: _____ Date: _____
Craig A. Rosen

Inventor's Signature: _____ Date: _____
Steven M. Ruben

Inventor's Signature: _____ Date: _____
Roxanne D. Duan

Inventor's Signature:  _____ Date: 2/26/02
Paul E. Young

Inventor's Signature: _____ Date: _____
Kimberly A. Florence

Inventor's Signature: _____ Date: _____
Paul A. Moore

Inventor's Signature: _____ Date: _____
Charles E. Birse

Inventor's Signature: _____ Date: _____
Jian Ni

Inventor's Signature: _____ Date: _____
Daniel R. Soppet

Inventor's Signature: _____ Date: _____
Yanggu Shi